



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,972	03/02/2004	Shunpei Yamazaki	0553-0242.01	2127

7590 01/28/2005
Stephen B. Heller
Cook, Alex, McFarron,
Manzo, Cummings & Mehler, Ltd.
200 West Adams Street - Suite 2850
Chicago, IL 60606

EXAMINER

LUHRS, MICHAEL K

ART UNIT	PAPER NUMBER
----------	--------------

2824

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11A

Office Action Summary

Application No.

10/790,972

Applicant(s)

YAMAZAKI ET AL.

Examiner

Michael K. Luhrs

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/798,608.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 16 July 2004.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☒ Other: search history.

DETAILED ACTION

Status of Claims

1. Examiner acknowledges cancellation of claims 2-17 without prejudice.

Information Disclosure Statement

2. The information disclosure statement filed 16 July 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; **each publication** or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Reference "5)" was not found; the examiner also looked to the parent case for reference "5)" but did not find it; please provide a copy of: Schenk, H. et. al., "Polymers for Light Emitting Diodes," EURODISPLAY '99, Proceedings of the 19th International Display Research Conference, Berlin Germany, September 6-9, 1999, pp. 33-37 (1999).

Claim Objections

3. Claim 1 is objected to because of the following informalities: The "discharge" is not supported by the specification, other than having a charged EL material with the charged mask or electrode. Examiner interprets 'discharge' as the effect of the vapor state, travel in vacuum deposition. The other species have already been patented in the parent case. Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,696,105. Although the conflicting claims are not identical, they are not patentably distinct from each other because: the EL atomized coating in the chamber as analogous to, the EL placed in a boat made to vapor in the present application, i.e. the 'EL material made to be in vapor state' would also

Art Unit: 2824

be atomized particles as they traverse the distance from the boat to the substrate as 'discharged from sample boat toward the substrate'.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et. al. (herein as "Nakamura" USPN 5,427,858. (Applicant's limitations in italics),

Regarding claim 1, (Currently Amended), Nakamura teach *a method of forming a thin film, wherein a sample boat having an EL material contained therein, as tris(8-quinolinol)aluminum i.e. "Alq" is placed in a boat, lines 34-37, column 18), ("whereby a light-emitting layer having a layer thickness of 60 nm was formed" line 51, column 18) a substrate having an electrode provided thereon, (first electrode formed by vacuum vapor deposition, line 31, column 10, formed on a substrate '11' glass plate, lines 3-4, column 11),*

and a mask between the sample boat and the substrate are provided, (a mask, for example in Nakamura's "Example 8", lines 43-45, column 22, mask may be used, i.e. see lines 52-53, column 22, as in examples 1 or 5), wherein the EL material is made to be in a vapor state in the sample boat, (the EL material, i.e. the Alq, is heated to 265°C to deposit the Alq, see lines 47-50, column 18; Alq is believed vapor at 265° and 1×10^{-4} Pa, lines 49 and 38, column 18 respectively),

wherein the EL material is in the vapor state is discharged from the sample boat toward the substrate, (is discharged, i.e. this is a vacuum deposition process, lines 28-29, column 18) and

wherein the EL material in the vapor state is made to pass through an opening of the mask corresponding to the electrode to deposit the EL material on the electrode on the substrate and form a thin film, ("a mask was covered on the ITO film 12a, i.e. '12a' is the electrode, and then a hole-injecting layer (layer '15') and a light-emitting layer (layer '18') were formed", lines 43-45, column 22), all as described from lines 54-67, column 22 in reference to Figure 3.


Conclusion


Art Unit: 2824

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Luhrs whose telephone number is 571-272-1874. The examiner can normally be reached on M-F, 8-5.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard T. Elms can be reached on 571-272-1869. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael K. Luhrs
12/13/04


RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800